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**Sent:** Monday, January 27, 2020 3:37 PM  
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**Subject:** RE: Diamond Alkali OU4 FS RTCs

A quick look at the comments highlighted by EPA below was performed. Responses are provided below.

First, CPG's responses to DEP comments 39, 54, 144, 160, 170, 283 and 320 are all acceptable; pending review of FS as EPA has indicated.

For the second group, DEP Comments 30, 59, 83, 122, 183 and 223, CPG's responses are mostly acceptable; however, comments 59 and 83 are called out below:

1. CPG's response to Comment 30: EPA response considered acceptable.
2. CPG's response to Comment 59: Review of CPG's revised text yields a new recommendation. The existing FS statement says: "Alternative 2 achieves the source control RAOs without additional removal and is the most cost-effective, achieving all the objectives of the IR for the lowest cost."  
Alternate recommendation: "*Alternative 2 is predicted to achieve* the source control RAOs with the smallest removal volume and is the most cost-effective." Please consider using revised text (in italics); delete rest of sentence as redundant.
3. CPG's response to Comment 83: EPA's response is not fully acceptable because CPG's revised text potentially allows for changing the specific goals which currently exist in the RAOs, to some other type of goals. (i.e., " ... that specify the goals to be attained by the remedial action."). Please retain DEP language.
4. CPG's response to Comment 122: EPA's response is acceptable.
5. CPG's response to Comment 183: EPA's response is acceptable.
6. CPG's response to Comment 223: EPA's response is acceptable.

If there are any questions or comments on these responses, please let us know. A full review of the RTC document will be performed and finished by next week, unless something is identified as a concern.

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**Sent:** Thursday, February 6, 2020 2:44 PM

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**Subject:** OU4, LPRSA, IRFS Review of USEPA Revision 2 Draft Compilation of comments, January 15, 2020

**SUBJECT: DASS OU 4, Lower Passaic River Study Area  
Interim Remedy Feasibility Study: Review of USEPA R2 draft compilation of  
comments, Jan. 15, 2020**

The New Jersey NJDEP of Environmental Protection (NJDEP) has completed its review of USEPA Region 2 Draft Compilation of the Feasibility Study (FS) comment responses to the CPG, dated Jan.15, 2020. The draft compilation document represents review comments by the USEPA and NJDEP regarding the CPG's August 2019 draft Feasibility Report.

Initial review of a subset of comments highlighted by the USEPA in the Jan. 23, 2020 email request to the NJDEP was previously completed; NJDEP's response was provided to Diane Salkie, USEPA, on January 28, 2020. Comment Responses involved in this primary review included comments 30, 39, 54, 59, 83, 122, 144, 160, 170, 183, 223, 283 and 320. With two exceptions, comments 59 and 83, all other response-combinations by the CPG and EPA were found to be acceptable. NJDEP's response to comments 59 and 83 are repeated below for completeness. Following this, NJDEP responses to the remaining comment-response combinations are provided and highlighted for possible FS workgroup discussion. In addition, the CSTAG's Interim Remedy FS recommendations, dated Jan. 31, 2020 were received during this review process and were reviewed and integrated as appropriate.

**CPG's response to Comment 59:** Review of CPG's revised text yields a new recommendation. The existing FS statement says: "Alternative 2 achieves the source control RAOs without additional removal and is the most cost-effective, achieving all the objectives of the IR for the lowest cost."

Alternate recommendation: "*Alternative 2 is predicted to achieve* the source control RAOs with the smallest removal volume and is the most cost-effective." Please consider using revised text (in italics); delete rest of sentence as redundant.

**CPG's response to Comment 83:** The CPG's revised text is not completely acceptable because it potentially allows for changing the *specific goals* which currently exist in the RAOs, to some other, perhaps less specific, goals. (i.e., " ... that specify the goals to be attained by the remedial action."). Please retain NJDEP's original recommended language.

Response to the remaining CPG and EPA comment-response combinations, including an additional 335 comments

Comments 1 & 2 (and several subsequent, related, comments) cover two key project topics and require additional discussion with EPA on current status, particularly given recent receipt of the CSTAG's Jan. 31, 2020 Interim Remedy FS recommendations letter.

Comment 1, PRGs: EPA's 1/15/20 response states: "EPA expects that the initial PRGs will be derived as single point estimates in parallel with the IR design and after the FWM has been finalized and peer reviewed. EPA recognizes that these single point PRGs may be refined over time as additional site information is gathered and more is known about the relationship between sediment and tissue concentrations. These single point PRGs may be subject to refinement until RGs are selected and documented in a Final ROD."

**Response:** The NJDEP agrees that single-point PRGs need to be derived during IR design following FWM peer review. However, as previously emphasized, maintaining this schedule must be prioritized so the process is streamlined. PRGs are necessary upfront goals for remedial decisions for DASS-OU4 and are also necessary for guiding effective use of Adaptive Management. Therefore PRGs need to be established as soon as feasible. Recent CSTAG recommendation 5a re-iterates this concern.

With regard to PRG refinement over time, the NJDEP warns against false expectations regarding the degree and frequency of PRG refinement. Given the already large amount of data, evaluation time, toxicological information review and risk assessment process invested in Lower Passaic River PRG development for DASS-OU2, and which has continued through the DASS-OU4 RI and risk assessment process (including the ongoing FWM development and planned peer review of same during the next 1-2 years), it is not anticipated that either significant or repeated refinement of PRGs before selection of RGs will be needed. Recent CSTAG recommendation 5d appears to reflect this concern by recommending increased rigor and transparency regarding the circumstances which may trigger re-evaluation of PRGs.

In addition, the CPG submitted an expanded response to EPA Comment 1, dated Oct. 31, 2019, provided to the NJDEP for review in mid-January 2020. The following response is provided:

In the third paragraph, the CPG describe factors with uncertainty which are considered to prohibit PRG develop in near term. However, as indicated above, the NJDEP considers the exiting sediment, biota and surface water data (as presented in the RI and Risk Assessments, and with additional biota and surface water data collection underway as part of current conditions sampling), as a strong basis for beginning PRG development. Coupled with identified chemicals of concern, receptors of concern and appropriate toxicity information for same, this collective information is the foundation for understanding existing receptor-contaminant relationships, assessed risks and therefore provides key factors needed for development of PRGs. *Existing specific areas of uncertainty in these relationships should be identified now, during FS development and IR design and, to the extent feasible, addressed during current conditions sampling.* In addition, as recommended by CSTAG (recommendation 5c), use of improved sampling techniques, such as passive diffusion sampling, could greatly aid in

improving our understanding of these relationships and should be incorporated in the sampling programs.

With regard to CPG's plan for periodic refinement of PRGs, as indicated above, CSTAG recommendation 5d emphasizes the need to improve the rigor of those reviews by more clearly identifying the inputs, evaluations and criteria to be used to support the need for re-evaluation of PRG validity. To the NJDEP, this means being clearer upfront (now) about what factors are potentially adjustable and establishing "guard rails" to guide this process.

Comment 2 addresses defining "source sediment" for the IR: The NJDEP generally agreed with EPA's response to the CPG dated 12/11/2019, whereby "source" was first qualitatively described for this river, and then quantitatively defined and directly linked to the RALs needed to achieve the alternative specific SWACs. However, the current status of this topic is unknown because the NJDEP has not been a participant in the additional discussions and materials shared between EPA and CPG on this topic since November 2019 forward.

The NJDEP's position on interpretation of "source" for this Interim Remedy has been previously communicated to the CPG and USEPA through NJDEP FS review comments 1b and 9a, Sept. 10, 2019, and the NJDEP's Nov. 14, 2019 letter to CSTAG, comment 1, page 9 of 12. In addition, CSTAG recommendation 1b provides clear guidance on this topic by questioning the need for a separate definition of "source" since it is inherently defined in RAO 1. As stated by CSTAG: "... RAO 1 describes material for remediation as those concentrations necessary to achieve the SWAC target." The NJDEP is in agreement.

Remaining comments for which clarification/discussion with EPA is requested, include:

**Comment 6 and associated Comments 162, 180 and 345,** sediment disposal options:

First, a correction: approximately 1/5<sup>th</sup> of the sediment addressed during the Tierra Phase I removal action was classified as RCRA Hazardous waste and required disposal in a Subtitle C landfill; a smaller portion of this material required incineration at a licensed RCRA facility. Second, the additional evaluations to be performed in this section should also include documented restrictions by Subtitle D facilities for accepting dioxin-impacted material; such restrictions are facility-specific. In addition, per State Regulations, N.J.A.C Title 7 Chapter 26, dredged material from New Jersey's coastal or tidal waters is excluded from the definition of solid waste (N.J.A.C 7:26-1.6(a)(5)). Therefore, sediment is prohibited from consideration as a solid waste, and as such, is prohibited from disposal in any solid waste Subtitle D landfills in New Jersey. However, if a portion of the sediment (i.e., sand) is found to meet appropriate criteria for beneficial use under New Jersey Solid Waste Regulations, this material may sometimes be used for daily cover and other appropriate uses at Subtitle D landfills, contingent on County Municipal Solid Waste plans and facility-specific permits.

**Comment 7,** Comparative Analysis of Alternatives: The NJDEP re-iterates former NJDEP comments 19 and 20, FS Review email to Salkie, September 10, 2019. Changes to the FS to address this comment should be incorporated in the next FS draft. In addition, the NJDEP

respectfully requests copies of correspondence, meeting notes and documents on this topic shared between the CPG and EPA, as cited in EPA's comment response, 1/15/2020. Also, CSTAG recommendations 1 and 4 are considered applicable and should be incorporated, to improve the Comparative Analysis of Alternative sections of the FS.

**Comment 43**, Long-Term Effectiveness: NJDEP agrees with EPA's 1/15/2020 response, but reiterates the need to remove the following sentence and similar statements elsewhere in the FS: "Alternatives 2, 3, and 4 achieve equivalent performance in long-term effectiveness and permanence." The NJDEP maintains that the greater level of sediment removal embodied in alternatives relative to each other are predicted to achieve greater levels of exposure/risk reduction due to predicted lower SWACs. Please also refer to CSTAG recommendation 1a, where the CSTAG emphasizes the IR goals in terms of contaminant exposure and risk reduction, as percent reduction in riverbed SWAC. Therefore, alternatives which target lower SWACs and are predicted to achieve these, should be characterized as resulting in greater anticipated exposure reduction, not equivalent exposure reduction, to alternatives which target higher SWACs.

**Comments 50, 51, 62**, Comparative Analysis of Alternatives: Re-evaluation of comments and responses regarding comparative analysis of alternatives is likely needed to re-align with SWAC goals as specific, absolute goals, rather than based on a separate concept/definition of IR "source" by the CPG. In short, Section 8 of the FS and associated sections (executive summary) will likely require revision to address CSTAG recommendations 1a-d and 4.

**Comment 52, 53, 116, 117, 209, 263, 266, 280**, source definition: Please refer to NJDEP response to comment 2 above and associated CSTAG recommendation 1b.

**Comment 153**, regarding statements on reactive caps: It should be noted that the addition of a reactive layer may or may not allow for thinner caps, depending on other site-specific factors at the capping location (physical, chemical, geomorphology). Instead, the language should be modified to state "...addition of reactive layers may allow for thinner cap designs....".

**Comment 194**, RAO 2: Revisions to this section of the FS should be informed by consideration and application of CSTAG recommendation 1c.

**Comment 219**, PRGs and source definition: For discussion. Based on CSTAG recommendations 1 and 5, possible revision to the original agency comment may be needed to give improved direction to CPG relative to these topics.

**Comment 319**, lessons learned: Please refer to CSTAG comment 4b regarding improved assessment of RM 10.9 TCRA and lessons learned in a manner that results in meaningful improvements to this project.

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